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Money Down the Drain?

A Review of Bottled Water in Massachusetts

**A Report of the
Senate Committee on Post Audit and Oversight
March 2000**

Massachusetts Senate

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*"When you drink the water, remember the spring."
--Chinese Proverb*

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The Senate Committee on Post Audit and Oversight works to ensure that state government is accountable to the citizens of the Commonwealth. The Committee's charge is to monitor compliance with state laws, to act as a watchdog to protect taxpayers from waste and fraud, to evaluate the efficiency and effectiveness of state agencies and programs, and to recommend corrective actions through legislation, regulation, and administrative initiatives.

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EXECUTIVE SUMMARY

Despite skyrocketing consumption of bottled water, Massachusetts' oversight of the bottled water industry has languished.

Bottled water is seemingly everywhere: at the office, at the gym, and in more than one-third of Massachusetts homes. In 1998, U.S. sales of bottled water reached \$4.3 billion. Bottled water has become commonplace in many American diets and is the fastest growing segment of the beverage industry.

Consumption of bottled water is increasing for a variety of reasons, including taste, convenience, and sometimes necessity. For these and other reasons, consumers pay anywhere from 240 to more than 10,000 times more per gallon for bottled water than they typically do for tap water. For example, a consumer in Ayer, MA who pays 22 cents for a one-year supply of drinking water from the tap could pay approximately \$1,168.00 for the same amount of a top-selling brand of treated bottled water.

Bottled water is sometimes the "water of last resort." During natural disasters such as Hurricane Floyd, or when public drinking water supplies become contaminated, bottled water becomes a necessity, not just a preference. During the summer of 1999 several Massachusetts towns including Sterling, Ware, and Westford suffered contamination of their public drinking water supplies, forcing residents to either boil their tap water or use bottled water. Furthermore, populations such as the very young and old and those with special health concerns are often urged by health professionals to consume bottled water.

Although bottled water is vulnerable to the same safety concerns as tap water, the public perceives bottled water to be safer, healthier, and more pure than tap water. However, in Massachusetts, consumers have no guarantee that bottled water is in fact any safer or purer than tap water. Given that consumers pay a hefty premium for bottled water, Massachusetts has a responsibility to make sure that bottled water is safe for consumption and that consumers know what they are getting.

Problems with bottled water have been documented here in Massachusetts:

- In 1995, bottled water contaminated by coliform bacteria was given to residents of a Westport home for the elderly and handicapped. Ingesting water contaminated with coliform bacteria, which is found in animal feces, can cause severe gastrointestinal problems and even death in some cases.
- In 1996, a spring in Millis used by major area bottlers exceeded EPA standards for trichloroethylene (TCE) twice in one year. TCE, the same chemical discovered in the Woburn water supply, is known to cause neurological problems and is a suspected carcinogen.
- In 1997, a Boston man bottled water from a well in his basement and offered it for sale to the public. Boston's Commissioner of Inspectional Services was quoted as saying, "I'd put that stuff in my gas tank before I'd drink it."

Bottled water companies that are members of an industry trade association, such as the International Bottled Water Association (IBWA), follow procedures that in some areas exceed Massachusetts standards for bottled water manufacturing and distribution. However, we cannot rely solely on voluntary standards such as those issued by IBWA to ensure the safety and quality of bottled water. Voluntary standards must be supported by an adequate structure of state regulations and enforcement.

The overall conclusion of the Senate Post Audit and Oversight Committee is that current regulations need to be updated and actively enforced by the Massachusetts Department of Public Health (DPH). Ironically, the explosion in bottled water sales has been accompanied by a significant reduction in DPH oversight and enforcement activities.

Problems with Bottled Water Oversight

Consumption Up, Oversight Down

1. **State oversight of bottled water has languished as consumption of the product has increased dramatically, with few resources dedicated to oversight and enforcement.** Currently, DPH estimates that only one-quarter of one full time employee's time is primarily dedicated to duties associated with oversight of bottled water. An employee who was working on bottled water full-time has not been replaced since leaving in 1996.

2. **There is an extensive backlog of permit applications.** Officials at DPH have estimated that 67% of applications are awaiting initial review, with an average wait of approximately six months. Some bottlers have waited up to a year for a permit that, according to DPH officials, should have taken one month to process. Furthermore, bottlers have been allowed to continue operating for up to a year beyond their renewal date without a renewal permit being issued.
3. **DPH bottled water records are incomplete and out-of-date.** The lack of a complete and up-to-date record keeping system weakens DPH's ability to maintain a system of oversight that is capable of identifying areas of concern, needed improvement, or success.
4. **Current regulations that require the submission of bottled water test results just once a year are insufficient.** The infrequency of data submission raises concerns about the state's ability to effectively monitor bottled water quality, and to detect violations in a timely manner.

Enforcement Drought

1. **DPH fails to ensure that required annual inspections of bottling plants are conducted.** Despite state regulations that require annual inspections of in-state bottling plants, most plants are inspected by DPH an average of once every 4.5 years.
2. **Unlicensed bottled water brands are being sold in Massachusetts.** Bottled water brands from companies that do not have valid, state-issued permits to sell bottled water were found on retail store shelves, a clear violation of state regulations. DPH has no mechanism, such as market sampling, to actively detect violations like the sale of unlicensed bottled water products.
3. **Mislabeled products goes undetected and unchallenged.** In spite of state regulations requiring bottled water labels to disclose information such as the source of the bottled water, products that violate this provision are being sold in Massachusetts.
4. **DPH fails to use available sanctions to enforce bottled water regulations.** When unlicensed and mislabeled bottled water is found on store shelves, DPH does not take active steps to remove the product or impose fines.
5. **DPH has no formal recall policy for bottled water.** Some recent bottled water recalls have been conducted without public notification or written documentation of the terms and conditions of the recall. The lack of a formal recall policy can lead to questions of industry interference in the oversight process, and may leave consumers without vital product quality information.

Overlapping Oversight and Out-of-Date Permit Fees

1. **The division of oversight duties between state and local agencies creates confusion and delays the permitting process.** Furthermore, there is no clear policy that details how bottled water oversight duties are to be shared between local boards of health and DPH.
2. **Current permit fees do not reflect the cost of oversight or the value of the natural resource.** At \$25 annually for in-state bottlers and \$100 annually for out-of-state bottlers, the fees do not adequately support even a minimal system of oversight to ensure the quality and safety of bottled water.

Recommendations

Given the continued surge in consumption of bottled water, Massachusetts should maintain an aggressive system of oversight to ensure that standards of safety for bottled water are met and that consumers receive the quality product for which they pay a hefty premium. Massachusetts needs a common sense system of bottled water oversight that is supported by sufficient staff and resources.

Recharging Bottled Water Oversight

1. **DPH should dedicate sufficient staff and resources to bottled water oversight and enforcement duties.**
2. **DPH should clear up its bottled water permit backlog and eliminate its practice of allowing companies to continue bottling operations without a properly issued permit or a documented extension.**
3. **DPH should revamp its bottled water record-keeping system.** Complete and accurate information should be available for permitted products, inspections, and violations.
4. **Bottled water companies that sell in Massachusetts should submit required weekly microbiological test results on a quarterly basis as further assurance that bottled water quality meets Massachusetts safety standards.**

Strengthening Enforcement Measures

- 1. As required by Massachusetts bottled water regulations, companies that sell bottled water in Massachusetts should undergo annual inspections.** DPH should ensure that annual inspections occur and are adequately documented.
- 2. Random market sampling should be conducted to ensure that bottled water for sale on Massachusetts store shelves is properly licensed and labeled.** To facilitate market sampling, Massachusetts should mirror Connecticut and New York requirements that permit numbers be printed on bottled water containers so that proof of permitting is readily visible to inspectors and consumers.
- 3. The state should enforce its labeling requirements.** If a bottler draws from a municipal water supply, the label should clearly state that the source is a "public water supply" as well as the location of the source.
- 4. DPH should use its statutory authority to impose sanctions, including removal of unpermitted products from store shelves and imposition of fines when appropriate.**
- 5. DPH should establish a formal recall policy including a procedure for appropriate public notification, and a requirement to document the terms and conditions of any product recall.**

Centralize and Support a System of Oversight

- 1. A clear policy should be in place that clarifies the division of bottled water oversight duties between local boards of health and DPH.** This will eliminate the confusion of roles that can result in permitting delays and a lack of adequate inspections.
- 2. Massachusetts should increase permit fees.** Permit fees should more accurately reflect the value of the natural resource and support an adequate regulatory structure.


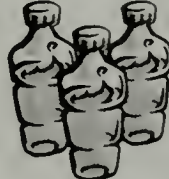
Background

Bottled water is seemingly everywhere: at the office, at the gym, and in more than one-third of Massachusetts homes.¹ In 1998 U.S. sales of bottled water reached \$4.3 billion.² Bottled water has become commonplace in many American diets and is the fastest growing segment of the beverage industry.³

Consumption of bottled water is increasing for a variety of reasons, including taste, convenience, and sometimes necessity. For these and other reasons, consumers are paying anywhere from 240 to over 10,000 times more per gallon for bottled water than they typically do for tap water.⁴ For example, a consumer in Ayer, MA who pays 22 cents for a one-year supply of drinking water from the tap could pay approximately \$1,168.00 for the same amount of a top selling brand of treated bottled water.⁵

Water Wallet Wallop?

Cost of a one-year supply of drinking water for one person, at eight 8-oz. glasses of water each day:

<u>Tap Water</u>			<u>Treated Bottled water</u>
\$0.22			\$1,168.00

Although bottled water is vulnerable to the same safety concerns as tap water, the public perceives bottled water to be safer, healthier, and more pure than tap water.⁶ Given that consumers pay a hefty premium for bottled water, Massachusetts has a responsibility to make sure that bottled water is safe for consumption and that consumers know what they are getting.

¹ "The Public's Views," *Mass Insight Briefing Report*, June 1998: 3.

² See "Bottled Water Statistics," available at <<http://www.bottledwaterweb.com>> (visited June 1999).

³ Ibid.

⁴ Olson, Erik. *Bottled Water: Pure Drink or Pure Hype?* Natural Resources Defense Council, 1999: 1.

⁵ Calculations based on recommended eight 8 oz. glasses of water a day. Tap water from the town of Ayer, MA costs 90 cents per 750 gallons (see Mohl, Bruce and Patricia Wen. "Whatever the Draw, Bottled Water Soaking up Lofty Profits." *Boston Globe* 9 Jan. 2000: B2) versus \$1.00 per 20 oz. bottle of Aquafina.

⁶ Lambert, Victor. "Bottled Water: New Trends, New Rules." *FDA Consumer* June 1993 (see <<http://www.fda.gov/bbs/topics/CONSUMER/CON00234.html>>).

When Bottled Water is a Necessity...Not Just a Preference

Bottled water is also often the "water of last resort." During natural disasters such as Hurricane Floyd or when public drinking water supplies become contaminated, bottled water becomes a necessity, not just a preference. For example, during the summer of 1999 several Massachusetts towns including Sterling, Ware, and Westford suffered contamination of their public drinking water supplies, forcing residents to boil their tap water or use bottled water.⁷

Bottled water is also more than just a preference for certain populations such as the very young, the elderly, and those with special health concerns. These populations are often urged to consume bottled water as an alternative to tap water out of concern for their safety.⁸ Consumers in these situations must be assured that their purchase will assist, rather than pose risks to, their health.

Milwaukee Water Woes

In 1993 *Cryptosporidium* contamination of the Milwaukee municipal water supply sickened 400,000 people and killed more than 100 people who drank water that was tainted with the microscopic parasite.⁹

Infection with *Cryptosporidium*, which is found in the feces of infected humans and animals, can cause gastrointestinal and physical complications such as diarrhea, nausea, and fever.¹⁰ Infection can be fatal to those with fragile immune systems such as infants and the elderly.

Contamination of water supplies with *Cryptosporidium* can occur when drinking water supplies become polluted with run-off from sewage or animal manure. Despite use of defensive techniques such as filtration and chlorination of the water supply against microorganismal contamination, *Cryptosporidium* still managed to wreak havoc in Milwaukee.

⁷ "Is Rainfall the Real Cause of the Contamination Problem..or is it a Convenient Excuse?" *Construction Outlook* October 1999: 8-9.

⁸ Olson, *supra* at 17.

⁹ Nadakavukaren, Anne. *Our Global Environment: A Health Perspective*. Illinois: Waveland Press, Inc., 1995; Blair, Kathleen. "Cryptosporidium and Public Health," *Journal of Environmental Health* 58:2 (1995): 34-36.

¹⁰ IBWA. "Bottled Water Safety and Quality," 1999.

Public drinking water supplies are also vulnerable to contamination that may result from natural events, such as heavy rainstorms.

Hurricane Havoc

Heavy rains from events such as hurricanes continue to pose threats to public drinking water supplies long after they pass.

During the summer of 1999, flooding caused by Hurricane Floyd resulted in contamination of public water supplies in the central Massachusetts towns of Ware and Sterling, and in the northeastern community of Westford. *E.coli* bacteria was found in the three water systems that serve more than 20,000 people.¹¹ Floodwaters are a potential breeding ground for bacteria such as *E.coli*, which can cause serious gastrointestinal sickness and even death.

Overview of Bottled Water Regulations

In 1988, based on a legislative mandate, the Massachusetts Department of Public Health (DPH) revised state bottled water regulations that were originally established in the 1930s.¹² This section briefly summarizes the standards that govern bottled water regulation.

How is the bottled water industry regulated?

The bottled water industry is regulated on both the federal and state levels. In addition, many major bottlers follow voluntary standards through membership in a trade association.¹³ Federal, state, and industry standards are designed to ensure that bottled water is tested, safe, and of good quality.

Federal Regulations

Throughout the United States, bottled water is regulated as a food product by the U.S. Food and Drug Administration (FDA). Bottled water companies must adhere to FDA regulations regarding standards of quality, standards of identity, and good manufacturing practices.¹⁴ Bottled water companies must also adhere to "National Primary Drinking Water Regulations" promulgated by the U.S. Environmental Protection

¹¹ "Is Rainfall the Real Cause of the Contamination Problem..or is it a Convenient Excuse?" *supra* at 8-9.

¹² Carter, Chris and Beth Altman. "Bottled Water Regulations Promulgated." *Food and Drug Reporter* 6 (Summer/Fall 1988): 10-13.

¹³ For example, members of the International Bottled Water Association (IBWA), a trade association, follow voluntary standards found in the IBWA's "Model Code."

¹⁴ 21 C.F.R. §§110, 129, and 165.

Agency (EPA).¹⁵ However, enforcement of these federal regulations is generally left to the states.¹⁶

State Standards

In addition to federal regulatory requirements, bottled water companies that sell in Massachusetts are also subject to the state's bottled water statutes and regulatory requirements. These statutes and regulations establish water sampling and testing requirements, labeling requirements, a permitting process, and water quality standards.¹⁷

State standards include the following requirements:

- 1) **Permitting.** State law requires that anybody selling bottled water in Massachusetts must have a permit. The permit is valid for one year and may be renewed. Local boards of health issue permits to in-state bottlers operating within their jurisdictions, although DPH often assists the local boards by reviewing the testing results and product labels that are included with the permit applications.¹⁸ Out-of-state bottlers correspond directly with DPH for permits to distribute their product in Massachusetts.¹⁹
- 2) **Inspections.** Massachusetts requires annual inspections of in-state bottling plants before a permit is issued or renewed.²⁰
- 3) **Labeling Requirements.** State labeling regulations require that bottled water labels identify the type of water and the location of its source on all bottled water sold in Massachusetts. For example, "if the water source is a public water supply, the label must state 'public water supply'."²¹
- 4) **Testing Requirements.** Massachusetts requires companies that sell bottled water in Massachusetts to conduct weekly tests for microbiological content and to test annually for chemical and physical properties of the source and finished water. These results must be submitted once a year with new or renewal bottled water permit applications.²²

¹⁵ 40 C.F.R. §141.

¹⁶ Olson *supra* at 4.

¹⁷ MASS. GEN. LAWS. Ch. 94 §§10A-G; 105 C.M.R. §570.00.

¹⁸ MASS. GEN. LAWS. Ch. 94 §§10A-B; 105 C.M.R. §570.021; Waskiewicz, Richard. Director, Food Protection Program, Massachusetts Department of Public Health (DPH). Telephone conversation. 22 Dec. 1999.

¹⁹ MASS. GEN. LAWS. Ch. 94 §10B; 105 C.M.R. §570.021.

²⁰ 105 C.M.R. §570.021.

²¹ 105 C.M.R. §570.006.

²² 105 C.M.R. §570.004.

Who enforces bottled water statutes and regulations in Massachusetts?

DPH enforces the bottled water statutes and regulations with assistance from the Massachusetts Department of Environmental Protection (DEP) and local boards of health.

Most bottled water related enforcement duties are carried out under the Food Protection Program (FPP) within the Division of Food and Drugs at DPH. The stated mission of FPP is "to strive to ensure a safe and wholesome food supply in the Commonwealth of Massachusetts."²³

FPP food inspectors enforce regulations covering dairy products, seafood, meat, poultry, and bottled water. Enforcement is one aspect of an inspector's overall job.

DPH food inspectors may:

- Conduct unannounced inspections of bottling plants to ensure quality and safety of manufacturing processes and the final product;
- suspend plant operations if violations occur with operations or the final product;
- prohibit the sale of products that do not comply with regulations and standards; and
- impose fines and penalties of \$100 for the first offense and up to \$500 for each subsequent offense.²⁴

DEP and DPH Share Certain Oversight Duties

DEP is involved in bottled water oversight at two critical points: (1) to approve an in-state water source that is proposed for use in commercial bottling of water and (2) at the request of DPH, such as when the source is suspected to be contaminated or is in violation of water quality standards.²⁵

Because DEP is responsible for initial approval of in-state sources for bottled water, DPH is responsible for overall oversight, a memorandum of understanding between DPH and DEP allows the two state agencies to work together. DEP has designated a staff person to act as its bottled water liaison to DPH.²⁶

²³ See <<http://www.state.ma.us/dph/fpp/fpp.htm>> (visited June 1999).

²⁴ MASS.GEN. LAWS. Ch. 94 §§C, F; 105 C.M.R. §§570.022-570.024, 570.029.

²⁵ dePeiza, Yvette. Manager, Water Quality Assurance Section, Department of Environmental Protection. Telephone conversation. 24 May 1999.

²⁶ Ibid.

Accomplishments in Massachusetts

The accomplishments of Massachusetts in the area of bottled water regulation should be recognized.

- In the late 1980s Massachusetts was a pioneer in updating statutes and regulations governing the bottled water industry.
- Throughout the 1990s when the FDA proposed tougher standards for bottled water, DPH consistently submitted comments in support of stricter federal regulations.²⁷
- Massachusetts has a strong record of providing information to the public on bottled water upon request and via the Internet. "Quality Standards for Bottled Water," permit applications, and an annual survey of the brands sold in the state are available on DPH's website.²⁸
- Massachusetts is one of only 14 states to have regulations that require source labeling on bottled water products.²⁹

²⁷ Ridley, Nancy. Assistant Commissioner, Bureau of Health Quality Management, DPH. Letter to the Federal Food and Drug Administration. 3 Mar. 1993.

²⁸ See <<http://www.state.ma.us/dph/fpp/fpp.htm>> (visited June 1999).

²⁹ Olson, *supra* at 60.

Problems with Bottled Water Oversight

In spite of the progress made by updating bottled water statutes and regulations in 1988, Massachusetts' system of bottled water oversight has not met all of the expectations and requirements outlined in the state's regulations and standards. The Committee has identified several areas of concern with the current system of bottled water oversight.

Consumption Up, Oversight Down

Languishing Oversight and Limited Resources

State oversight of bottled water has languished as consumption of the product has increased dramatically, with few resources dedicated to oversight and enforcement. Ironically, the explosion in bottled water sales has been accompanied by a significant reduction in DPH oversight and enforcement activities.³⁰

- As recently as 1996, there were two DPH employees who worked on bottled water oversight, amounting to 1.5 full time employees.³¹
- Currently, DPH estimates that one-quarter of one full-time employee's time is primarily dedicated to carrying out duties associated with oversight of bottled water.³²

Table 1. **Massachusetts' Staffing Shortage**

	Massachusetts	Mississippi	California	New York	New Jersey	Virginia	Oklahoma
Number of Full-time State Employees Dedicated to Bottled Water Oversight ³³	0.25	3	2	1-1.5	1	1-2	1

³⁰ Waskiewicz, Richard. Director, Food Protection Program, DPH. Letter to Senate Post Audit and Oversight (PAO) Bureau. 9 July 1999.

³¹ One DPH employee informally made bottled water oversight her full-time job and concentrated on enforcement duties, while another half-time employee was hired to review the growing backlog of permit applications. (Nabreski, David. Senior Food Inspector, Division of Food and Drugs, DPH. Personal Interview. 3 June 1999.)

³² Nabreski, David. Senior Food Inspector, Division of Food and Drugs, DPH. Personal interview. 3 June 1999.

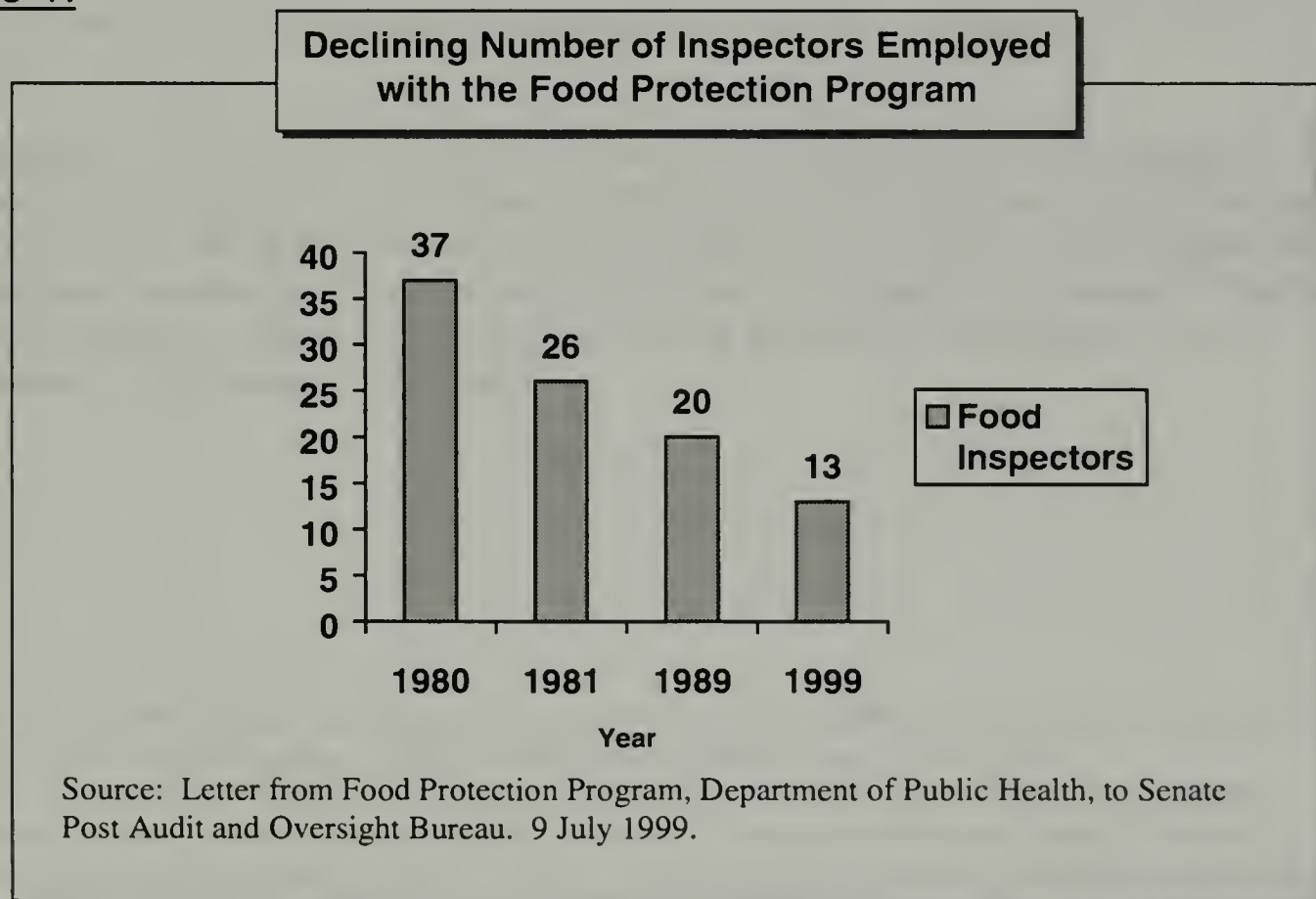
³³ Olson, *supra* at 111-123.

A Recipe for Concern

Since 1980, the Food Protection Program (FPP) has seen "severe staff reductions."³⁴ The number of food inspectors employed at DPH, whose duties include bottled water oversight, has dwindled from 37 in 1980 to 13 in 1999, a 60% reduction (see figure 1). While the number of inspectors has decreased over the past two decades, the number of establishments that need to be inspected has increased.³⁵

The FPP competes for funding and resources with other public health initiatives such as AIDS programs and tobacco control. Exacerbating this problem is the fact that within FPP, bottled water competes for attention and resources with other foods that demand oversight, such as dairy, meat, poultry, and seafood products.

Figure 1.



³⁴ Waskiewicz, Richard. Director, Food Protection Program, DPH. Letter to Senate PAO Bureau. 9 July 1999.

³⁵ Ibid.

Drowning in Bottled Water Permits

There is an extensive backlog of bottled water permit applications. Officials at DPH have estimated that 67% of applications are awaiting initial review, with an average wait of approximately six months.³⁶ Some bottlers have waited up to a year for a permit that, according to DPH officials, should have taken one month to process.³⁷ Furthermore, bottlers have been allowed to continue operating for up to a year beyond their renewal date without a renewal permit being issued.³⁸

Despite the fact that the process of reviewing permit applications monopolizes most of the time spent on bottled water oversight, an extensive backlog persists.³⁹ Timely processing of permit applications is also an issue of concern among local boards of health.⁴⁰

A Leaky Record Keeping System

DPH bottled water records are incomplete and out-of-date. The lack of a complete and up-to-date record keeping system weakens DPH's ability to maintain a system of oversight that is capable of identifying areas of concern, needed improvement, or success.

For example, DPH provided records to the Senate Post Audit and Oversight Committee that were not complete or up-to-date regarding permitted companies and inspections. DPH provided a list of the companies permitted to sell bottled water in Massachusetts that included several bottling companies that are no longer in business.⁴¹ Furthermore, DPH officials have stated that they do not keep records of violations, such as mislabeled or unlicensed products.⁴²

³⁶ According to DPH officials, the average holding time of a permit at DPH is 5.75 months. Waskiewicz, Richard. Director, Food Protection Program, DPH. Letter to Senate PAO Bureau. 2 Feb. 2000.

³⁷ Waskiewicz, Richard. Director, Food Protection Program, DPH. Personal interview. 15 June 1999.

³⁸ Moultrup, Donna. Director, Belmont Health Department. Telephone interviews. 29 Mar. 1999 and 12 Nov. 1999.

³⁹ Currently, a five-page backlog persists. In 1996, a 12-page backlog existed, and DPH hired a temporary employee to help reduce this backlog. The employee spent 100% of his time on processing the bottled water permits. The same employee has since been hired as a full-time food inspector, and estimates that 1/4 of his time is spent on bottled water, 60-70% of which is still spent on reviewing permits. The rest of the time he spends on bottled water is used to enter data, assist customers, and conduct bottling plant inspections. Nabreski, David. Senior Food Inspector, Division of Food and Drugs, DPH. Personal interview. 3 June 1999.

⁴⁰ Survey of Local Boards of Health. Conducted by Massachusetts Health Officers Association (MAHB) on behalf of Senate PAO Committee. 19 July 1999.

⁴¹ "Bottle Water/Carbonated Beverage Files, Current Permit Holders." Provided by DPH to the Senate PAO Bureau. 3 June 1999.

⁴² Waskiewicz, Richard. Director, Food Protection Program, DPH; Tierney, Paul. Assistant Director, Food Protection Program, DPH; Nabreski, David. Senior Food Inspector, Division of Food and Drugs, DPH. Personal interview. 18 Nov. 1999.

Testing the Waters: Results Trickle In

Current regulations that require the submission of bottled water test results just once a year are insufficient. The infrequency of data submission raises concerns about the state's ability to effectively monitor bottled water quality, and to detect violations in a timely manner.

Under current regulations, test results of the source and finished water are submitted once a year with a permit application from a bottled water company. Massachusetts bottled water regulations require annual testing for certain chemicals, such as trichloroethylene (TCE) and arsenic, and weekly testing of microbiological content.⁴³ The knowledge that test results will be seen only once a year provides little incentive for companies to inform regulatory authorities of potentially dangerous quality problems.

Enforcement Drought

Infrequent Inspections: "Trust But Verify "

DPH fails to ensure that required annual inspections of bottling plants are conducted. Despite state regulations that require annual inspections of in-state bottling plants, most plants are inspected by DPH an average of once every 4.5 years.⁴⁴ While local boards of health may conduct the required inspections in the interim, DPH records do not indicate when an inspection is conducted by a party other than DPH. Furthermore, although DPH has regulatory authority to conduct surprise inspections of bottling plants, it has no history of having conducted any within the past five years.⁴⁵

Officials at DPH explain that their prolonged cycle of inspections is due to their focus on other food safety issues.⁴⁶ However, the infrequency of DPH inspections raises public health concerns and could dilute the public's confidence in the safety of bottled water. Concerns about infrequent inspections and overall product safety are highlighted by the 1996 recall of Veryfine Balsams Spring Baby Water, and by TCE contamination of the Ann & Hope well in Millis, Massachusetts.

⁴³ 105 C.M.R. §570.004.

⁴⁴ 105 C.M.R. §570.021; Waskiewicz, Richard. Director, Food Protection Program, DPH. Letter to Senate PAO Bureau. 19 July 1999.

⁴⁵ 105 C.M.R. §570.022; Waskiewicz, Richard. Director, Food Protection Program, DPH; Tierney, Paul. Assistant Director, Food Protection Program, DPH; Nabreski, David. Senior Food Inspector, Division of Food and Drugs, DPH. Personal interview. 18 Nov. 1999. Some bottling companies welcome inspections by the state, and are more than willing to be subject to surprise inspections. A product brochure from the Poland Springs bottled water company states, "We are subject to and welcome impromptu inspections by federal and state authorities."

⁴⁶ Ridley, Nancy. Assistant Commissioner, Bureau of Health Quality Management, DPH. Personal interview. 4 June 1999; Waskiewicz, Richard. Director, Food Protection Program, DPH. Personal interview. 15 June 1999.

Bad Baby Water

In 1996, containers of Veryfine Balsams Spring Baby Water and Balsams Baby Water were recalled due to contamination with mold, bacteria and fungus.⁴⁷ This contamination was discovered after consumers complained about "scum," "black particles," and cottony-looking mold floating in the containers.⁴⁸

Bottled water is often recommended for the very young by health professionals due to their delicate immune systems, which are susceptible to infection by microorganisms. Some manufacturers label their bottled water for use in preparing infant formulas.⁴⁹ Although many people assume bottled water to be safer to drink than ordinary tap water, the FDA continues to advise consumers to treat bottled water as they would tap water by boiling before mixing with baby formula.⁵⁰

Unlicensed Bottled Water Products

Unlicensed bottled water brands are being sold in Massachusetts. Bottled water brands from companies that do not have valid, state-issued permits to sell bottled water were found on retail store shelves, a clear violation of state regulations.⁵¹ DPH has no mechanism, such as market sampling, to actively detect violations like the sale of unlicensed bottled water products.

⁴⁷ Case file provided by DPH to the Senate PAO Bureau. A recall notice of Balsams Baby Water was issued by DPH on January 12, 1996.

⁴⁸ Records from Food Protection Program, Division of Food and Drugs, DPH. "Summary of Current Information on Balsams Baby Water." 20 Mar. 1996.

⁴⁹ See <<http://vm.cfsan.fda.gov/~dms/qa-inf3.html>> (visited December 9, 1999).

⁵⁰ Ibid.

⁵¹ MASS. GEN. LAW Ch. 94 §10A; Survey of Bottled Water on Store Shelves. Conducted by Senate PAO Bureau. July 1999.

Fill 'er Up?

In 1997 a man in Dorchester, MA was caught bottling water from the basement of his house and labeling it as "Youth Fountain" water. The Commissioner of Boston Inspectional Services was quoted as saying, "I'd put that stuff in my gas tank before I'd drink it."⁵²

Bottles of the water were advertised for sale at a store a few blocks away from the house where it was being pumped. The label on "Youth Fountain" showed a gray-haired man drinking the water and reflected in a mirror as a young man.⁵³

This is not the only example of unlicensed bottled water products being offered on Massachusetts store shelves.

In a field survey conducted by the Senate Post Audit and Oversight Bureau during the summer of 1999, unlicensed bottled water products were found for sale at retail stores in Boston and surrounding areas. Of the 37 different brands found for sale, four (11%) were not listed in DPH records as being permitted for sale in Massachusetts. The unlicensed brands found were: *Apollinaris*, *Evans Spring Water*, *Indian Wells*, and *Maine Raine*.⁵⁴

Some states, such as New York and Connecticut, require water bottlers to imprint their state permit numbers directly on the product.⁵⁵ This policy serves as additional assurance that bottled water sold in those states is properly licensed for sale, and facilitates spot checking for unlicensed products.

Lax Labeling Enforcement

Massachusetts' requirements for source labeling of bottled water are more stringent than federal regulations for source labeling. However, the Commonwealth's enforcement of its labeling regulations is lax.

Massachusetts is one of only 14 states that require bottling companies to indicate the source of their bottled water on the label.⁵⁶ For example, if the source of bottled water is a public water supply, the label must state "public water supply."⁵⁷ Contrary to

⁵² Meyers, Jack. "Hub Officials Pull Plug on 'Polluted' Spring Water Operation," *Boston Herald* 4 Nov 1997: 11.

⁵³ Ibid.

⁵⁴ Survey of of Bottled Water on Store Shelves. Conducted by Senate PAO Bureau. July 1999.

⁵⁵ 10 NYCRR §5-6.12; CONN.GEN. STAT. §21a-141.

⁵⁶ Olson, *supra* at 60.

⁵⁷ 105 C.M.R. §570.006. In contrast, federal regulations allow companies that bottle municipal water to omit the source on the bottle label, if the water is treated to meet the U.S. Pharmacopeia definitions of "purified" or "distilled" water (for example, through ozonation or reverse osmosis processes). (21 C.F.R. §165.110(a)(3)(ii)).

Massachusetts bottled water regulations, some bottled water companies whose sources are public water supplies are selling their products in Massachusetts without clearly disclosing this fact on their product labels.⁵⁸

"Fancy Bottles at Fancy Prices"⁵⁹

Until 1993, federal regulations did not require bottled water companies to reveal on the label the source of their bottled water.⁶⁰ In 1991, the U.S. Energy and Commerce Committee learned that fully 25% of bottled water brands were simply drawn from municipal supplies and put into "fancy bottles at fancy prices" and that another 25% couldn't document from where their water was obtained.⁶¹ As a result, the FDA tightened its regulations. Under the new federal rules, if bottled water is derived from a municipal source, this information must be clearly stated on the label. However, if the product has been treated sufficiently to meet definitions of "distilled" or "purified" water, then source disclosure is not required by the FDA.⁶² Massachusetts state regulations, however, do not allow for this exemption, and clearly require source disclosure on the label when bottled water comes from a public water supply.⁶³

From a consumer's right-to-know perspective, this lack of full disclosure is troubling. For instance, some products that are derived from public water supplies present an image that could lead consumers to believe the water comes from natural springs.

⁵⁸ Aquafina and Dasani, brands of PepsiCo, Inc. and the Coca-Cola Company, respectively, are examples of bottled water sold in Massachusetts in which the source is a public water supply and the labels do not state the source.

"PWS," an industry term for public water supply, is printed on the caps of Aquafina bottles.

⁵⁹ Nadakavukaren, *supra* at 629-630.

⁶⁰ Ibid.

⁶¹ McCarroll, Thomas. "Testing the Waters." *Time Magazine* 26 Apr. 1993: 54.

⁶² 21 C.F.R. §165. 110 (a) (3) (ii).

⁶³ 105 C.M.R. §570.006. In 1997, DPH attempted to get an opinion from the FDA as to whether Massachusetts source labeling regulations are preempted by federal law, a query that has been left unresolved. (Ridley, Nancy. Assistant Commissioner, Bureau of Health Quality Management, DPH. Letter to the Senate PAO Bureau. 28 June 1999).

Misleading Mountains

Aquafina, a leading brand of bottled water produced by PepsiCo, Inc. has a label that prominently features a sketch of a mountain range. However, contrary to Massachusetts state regulations, the label does not reveal that the source of the water is in fact the Town of Ayer's public water supply. The only way a consumer would know that the water is from a municipal water supply is by interpreting the letters "PWS" on the bottle cap, an industry term for "public water supply." Current Massachusetts regulations explicitly require disclosure of the water source on the product label.⁶⁴

PepsiCo pays the Town of Ayer the same price that local residents pay for their water, 90 cents for every 750 gallons. This translates to approximately two one-hundredths of a cent for a 20 oz. bottle of Aquafina that sells in the store for approximately one dollar, 5000 times the actual cost of the water. PepsiCo uses about 300,000 gallons of water per day to produce Aquafina, fully one-third of the town's overall usage. PepsiCo faces no restrictions on the amount of water it can draw, while Ayer residents are restricted in their outdoor water usages.⁶⁵

Watered Down Sanctions

DPH fails to use available sanctions to enforce bottled water regulations. Even when unlicensed or mislabeled bottled water is found on store shelves, DPH does not take steps to remove the product or impose fines.⁶⁶

State law authorizes DPH to impose penalties of \$100 for a first offense and up to \$500 for each subsequent offense.⁶⁷ In addition, DPH or the local boards of health can suspend or revoke in-state bottlers' permits to operate if the plant fails to comply with any of the regulations.⁶⁸ However, fines are rarely issued for bottled water violations.⁶⁹

⁶⁴ 105 CMR §570.006.

⁶⁵ Mohl, Bruce and Patricia Wen. "Whatever the Draw, Bottled Water Soaking Up Lofty Profits," *supra* at B2; Mohl, Bruce and Patricia Wen. "Mountain on Water's Label Just a Mirage." *Boston Globe* 19 Oct. 1997: B2.

⁶⁶ Tierney, Paul. Assistant Director, Food Protection Program, DPH. Personal interview. 3 June 1999.

⁶⁷ MASS. GEN. LAWS. Ch. 94 §10F.

⁶⁸ 105 C.M.R. §§570.023- 570.024.

⁶⁹ Tierney, Paul. Assistant Director, Food Protection Program, DPH. Letter to Senate PAO Bureau. 30 July 1999.

Solvents in the Spring

In 1996, a popular spring in Millis, MA used by major area bottled water suppliers twice exceeded allowable levels of trichloroethylene (TCE). The source, owned by the Ann & Hope Company, had a history of TCE contamination, including at least two additional incidents in the previous four years.⁷⁰ This spring is located beneath a commercial parking lot, adjacent to a factory that produces asphalt roofing shingles.

Exposure to TCE, an industrial solvent used as a degreaser in dry cleaning and metal parts industries, can cause severe neurological and physical problems, and is a possible carcinogen.⁷¹ TCE is the same chemical that was found in the water supply in Woburn and is suspected of contributing to the development of multiple childhood leukemia cases in that community.

The spring is not currently being used as a commercial bottled water source, but the water is being used to fill swimming pools.⁷²

No Policy on Product Recalls

DPH has no formal recall policy for bottled water. Some recent bottled water recalls have been conducted without public notification or written documentation of the terms and conditions of the recall. The lack of a formal recall policy can lead to questions of industry interference in the oversight process, and may leave consumers without vital product quality information.

Silent Recall

In 1996, after consumer complaints about taste, Poland Springs recalled some of its bottled water products from Massachusetts store shelves because of high chlorine levels. Although DPH prepared a press release on the recall, it was never issued and neither DPH nor the company publicized the recall.⁷³ This case highlights concerns about the lack of a formal recall and public notification policy at DPH.

⁷⁰ Talbot, David. "Bottled Water Flows From Troubled Well." *Boston Herald* 16 Dec. 1996; Letter from Elizabeth Bourque, Environmental Policy Coordinator, Food Protection Program, DPH, to Paul Tierney, Assistant Director, Food Protection Program, DPH. 13 Dec. 1996.

⁷¹ See <<http://www.epa.gov>> (visited December 23, 1999).

⁷² Ridley, Nancy. Assistant Commissioner, Bureau of Health Quality Management, DPH. Letter to Senate PAO Bureau. 12 May 1997.

⁷³ Mohl, Bruce. "Consumer Beat: A Quiet Recall of Water." *Boston Globe* 2 Nov. 1997: B2.

When asked about its recall policy, officials at DPH responded that negotiations about product recalls are done with companies over the telephone, and are not documented or recorded in any way.⁷⁴ This failure to document terms and conditions of a recall raises serious questions of accountability.

Officials at DPH report that they informally follow federal guidelines governing recalls.⁷⁵ However, in Massachusetts, recall procedures are not addressed in the state's bottled water regulations, and DPH has not adopted any formal recall policy.

Waste in the Water

In 1995, residents of Greenwood Terrace, a home for the elderly and handicapped in Westport, MA were provided with bottled water that was contaminated with fecal coliform.⁷⁶ Fecal coliform is a bacterium found in the intestines of humans and animals that is transmitted by unsanitary conditions and can cause severe gastrointestinal complications, including diarrhea.

Greenwood Terrace residents include many senior citizens with sodium restricted diets who require low sodium or sodium free water. The state agreed to provide the residents with bottled water because the facility's own water supply was contaminated, possibly by road salt run-off. Simpson Springs of South Easton, MA won the contract to supply the bottled water to Greenwood Terrace.

Problems with the Simpson Springs bottled water became apparent when a Greenwood Terrace employee read in the newspaper that the Simpson Springs bottling plant had been ordered by the state to shut down temporarily due to bacterial contamination violations. Upon contacting the bottler, the employee was told that a violation had occurred, but that the plant was back in compliance.

However, when Simpson Springs again began delivering water to Greenwood Terrace, the employee nevertheless submitted samples of the water for testing to the Westport Health Department. The samples of water tested positive for high bacterial count, indicating contamination with fecal coliform. At least one resident reported feeling ill from drinking this batch of water. Simpson Springs was subsequently terminated as a bottled water supplier to Greenwood Terrace.⁷⁷

⁷⁴ Ridley, Nancy. Assistant Commissioner, Bureau of Health Quality Management, DPH. Personal interview. 4 June 1999.

⁷⁵ 21 C.F.R. §7.40-7.59 outlines the FDA's policy in situations requiring recalls; Ridley, Nancy. Assistant Commissioner, Bureau of Health Quality Management, DPH. Letter to Senate PAO Bureau. 28 June 1999.

⁷⁶ Documents provided to Senate PAO Bureau by the Massachusetts Highway Department, 6 Oct. 1999; Beaulieu, Helen. Administrative Assistant, Westport Housing Authority. Telephone interview. 28 Aug 1999.

⁷⁷ Ibid.

Overlapping Oversight

Confusion of Regulatory Roles

The division of oversight duties between state and local agencies creates confusion and delays the permitting process. Furthermore, there is no clear policy that details how bottled water oversight duties are to be shared between local boards of health and DPH.

Timeliness in issuing permits is a concern among bottling companies and local boards of health. According to the director of the FPP, the ideal turnaround time for reviewing the permit applications is one month.⁷⁸ In Belmont, the director of the Department of Health had to wait a year to issue a renewal permit to a bottler in her jurisdiction because DPH failed to schedule a timely plant inspection. In haste, the director was forced to conduct the plant inspection herself, even though she lacked specific training in this type of inspection. In the interim, the bottler was still manufacturing and selling the water, technically without a valid license.⁷⁹

Local boards of health rely on DPH expertise to review tests prior to issuing a permit to a bottler within its jurisdiction.⁸⁰ The most rigorous and time consuming part of the permitting process lies in reviewing the testing analytics, which is typically done by DPH.⁸¹

Although state regulations authorize local boards of health to conduct the annual inspections of the plants, there is no clear arrangement between DPH and the local boards of health regarding inspections.⁸² Some local boards of health say they conduct annual inspections of the bottling plants, and still others say that they rely on DPH to conduct them.⁸³ In either case, DPH does not have a system of documenting when or if local boards of health conduct annual inspections.

⁷⁸ Waskiewicz, Richard. Director, Food Protection Program, DPH. Personal interview. 15 June 1999.

⁷⁹ Moultrup, Donna. Director, Belmont Health Department. Telephone interview. 29 Mar. 1999 and 12 Nov. 1999; Zink, David. Plant Manager, Belmont Springs, Suntory Waters. Telephone interview. 7 Dec. 1999.

⁸⁰ Survey of Local Boards of Health. Conducted by MAHB on behalf of Senate PAO Committee. 15 July 1999.

⁸¹ Waskiewicz, Richard. Director, Food Protection Program, DPH. Telephone interview. 22 Dec. 1999.

⁸² 105 C.M.R. §570.021.

⁸³ Survey of Local Boards of Health. Conducted by MAHB on behalf of the Senate PAO Committee. 15 July 1999; Moultrup, Donna. Director, Belmont Health Department. Telephone interview. 29 Mar. 1999.

Out-of-Date Permit Fees

Current permit fees do not reflect the cost of oversight or the value of the natural resource. The permit fee to bottle and sell water has not been significantly revised since it was set in the 1930s.⁸⁴ At \$25 annually for in-state bottlers and \$100 annually for out-of-state bottlers, the fees do not adequately support even a minimal system of oversight to ensure the quality and safety of bottled water.⁸⁵

Other states, such as California and New York, have more up-to-date permit fees.

Massachusetts' Paltry Permit Fees

	California ¹	New York City ²	Massachusetts ³	
			In-state Bottler	Out-of-state Bottler
Initial permit fee	\$963.50	\$695	\$25	\$100
Renewal permit fee (per year)	\$963.50 ⁴ \$341.34 ⁵	\$535	\$25	\$100

1 Source: California Department of Health Services, Office of Food and Drug, Drinking Water. 30 Nov. 1999.

2 Source: New York City Department of Health. 22 Nov. 1999.

3 801 C.M.R. §4.02 .

4 Fee charged to bottlers producing more than 5000 gallons/week of bottled water.

5 Fee charged to bottlers producing less than 5000 gallons/week of bottled water.

⁸⁴ Carter, Chris and Beth Altman, *supra* at 10-13.

⁸⁵ 801 C.M.R. §4.02.

National Perspective

Expert Opinions

Experts in bottled water and environmental health consider the issue of languishing bottled water oversight a national problem.⁸⁶ In 1991 the U.S. Energy and Commerce Committee conducted an extensive investigation of the bottled water industry and concluded the main problem was "inexcusably negligent" regulatory oversight of bottled water as a food product by the FDA. As a result, the FDA revised its bottled water regulations.⁸⁷

National Report Critical of Bottled Water Oversight

The Natural Resources Defense Council (NRDC), a major non-profit environmental and public interest group, conducted a four year study on bottled water and published its findings and recommendations in a report released in February 1999.⁸⁸ From this report emerged several conclusions, including the following:

- Bottled water is not necessarily of any better quality than municipal tap water and not necessarily the healthier or wiser choice.
- Federal regulations governing bottled water are weak.
- State regulations for bottled water are weak and generally go unenforced.
- Bottled water oversight on both national and state levels is poorly staffed and underfunded, and does not support effective regulation of bottled water. For instance, the FDA leaves enforcement to "ill-equipped and understaffed" state governments.
- Voluntary bottled water industry controls, though commendable, are not sufficient substitutes for effective government rules and programs.
- Bottled water marketing and labeling can be misleading.
- The long term solution to drinking water problems is not to switch to bottled water but to improve tap water.⁸⁹

⁸⁶ Griffiths, Jeffrey. Assistant Professor, Department of Family Medicine and Community Health, Tufts University School of Medicine. Personal interview. 4 Mar. 1999; Olson, Erik. Senior Attorney, Natural Resources Defense Council. Telephone interview. 17 Feb. 1999; Rosenberg, Fred. Northeastern University Department of Biology. Telephone interview. 4 Mar. 1999.

⁸⁷ McCarroll, *supra* at 54.

⁸⁸ Olson, Erik. *Bottled Water: Pure Drink or Pure Hype?* *supra* at 1-14.

⁸⁹ Olson, *supra* at 1-14.

What Other States are Doing

Other states have bottled water oversight programs that exceed some aspects of Massachusetts' regulatory system. For instance:

- New Jersey law requires that the state retain an annual summary of test results as well as enforcement and violation data.⁹⁰
- Connecticut and New York require bottlers to imprint state permit numbers on product containers.⁹¹
- New York requires monthly submission of testing reports on all physical, chemical, radiological and microbiological analytical results of bottled water.⁹²

The International Bottled Water Association (IBWA)

The International Bottled Water Association is a trade association for the bottled water industry. Members of IBWA produce about 85% of the bottled water sold in the United States and must meet voluntary industry standards established by the association.⁹³ The standards contained in the IBWA Model Code are more stringent than the FDA regulations currently in place for bottled water.⁹⁴ Standards that go beyond the FDA regulations include:

- a requirement that annual inspections be conducted by an independent third party; and
- a requirement that association members be subject to surprise plant inspections.⁹⁵

IBWA has generally supported stricter federal regulation over bottled water, and has publicly expressed a preference that the bottled water industry be viewed as strictly regulated.⁹⁶

⁹⁰ N.J.S.A. 58:12A-18.

⁹¹ CONN. GEN. STAT. §21a-141; 10 NYCRR §5-6.12.

⁹² 10 NYCRR §5-6.13.

⁹³ IBWA. "Bottled Water Regulations: Questions and Answers." Alexandria, VA: IBWA, 1999. See also <<http://www.bottledwater.org>> (visited June 1999). Some IBWA members are from foreign countries. Compared to the U.S., the EU has stricter monitoring of sources, tougher regulations and more resources dedicated to oversight. In large part these differences stem from geological and cultural differences between the countries. EU prefers to minimize treatment of the water before it is bottled and distributed, and therefore places greater emphasis on protecting the source water or well heads.

⁹⁴ IBWA. "Bottled Water Regulations: Questions and Answers," 1999.

⁹⁵ IBWA. "Bottled Water Questions and Answers," 1999.

⁹⁶ Lecos, Chris. "Proposed Standard Definitions for Various Terms Used on Labels of Bottled Water," 31 Dec. 1992 (available at <<http://www.fda.gov/bbs/topics/NEWS/NEW00333.html>>).

Findings and Recommendations

Recharging the Massachusetts Bottled Water Oversight System

FINDING:

State oversight of bottled water has languished as consumption of the product has increased dramatically, with few resources dedicated to oversight and enforcement. Currently, DPH estimates that one-quarter of one full-time employee's time is primarily dedicated to carrying out duties associated with oversight of bottled water.

RECOMMENDATION:

DPH should dedicate sufficient staff and resources to bottled water oversight and enforcement duties.

FINDING:

There is an extensive backlog of permit applications. Officials at DPH have estimated that 67% of applications are awaiting initial review, with an average wait of approximately six months. Some bottlers have waited up to a year for a permit that should take one month to process. Furthermore, bottlers have been allowed to continue operating for up to a year beyond their renewal date without a renewal permit being issued.

RECOMMENDATION:

DPH should clear up its bottled water permit backlog and eliminate its practice of allowing companies to continue bottling operations without a properly issued permit or a documented extension.

FINDING:

DPH bottled water records are incomplete and out-of-date. The lack of a complete and up-to-date record keeping system weakens DPH's ability to maintain a system of oversight that is capable of identifying areas of concern, needed improvement, or success.

RECOMMENDATION:

DPH should revamp its bottled water record-keeping system. Complete and accurate information should be available for permitted products, inspections, and violations.

FINDING:

Current regulations that require the submission of bottled water test results just once a year are insufficient. The infrequency of data submission raises concerns about the state's ability to effectively monitor bottled water quality, and to know about violations in a timely manner.

RECOMMENDATION:

Bottled water companies that sell in Massachusetts should submit required weekly microbiological test results on a quarterly basis as further assurance that bottled water quality meets Massachusetts safety standards.

Strengthening Enforcement Measures**FINDING:**

DPH fails to ensure that annual inspections of bottling plants are conducted. Despite state regulations that require annual inspections of in-state bottling plants, most plants are only inspected by DPH an average of once every 4.5 years.

RECOMMENDATION:

As required by Massachusetts bottled water regulations, companies that sell bottled water in Massachusetts should undergo annual inspections. DPH should ensure that annual inspections occur and are adequately documented.

FINDING:

Unlicensed bottled water brands are being sold in Massachusetts. Bottled water brands from companies that do not have valid, state-issued permits to sell bottled water were found for sale on retail store shelves, a clear violation of state regulations. DPH has no mechanism, such as market sampling, to actively detect violations like the sale of unlicensed bottled water products.

RECOMMENDATION:

Random market sampling should be conducted to ensure that bottled water for sale on Massachusetts store shelves is properly licensed and labeled. To facilitate market sampling, Massachusetts should mirror Connecticut and New York requirements that permit numbers be printed on bottled water containers so that proof of permitting is readily visible to inspectors and consumers.

FINDING:

Mislabeling of products goes undetected and unchallenged. In spite of state regulations requiring bottled water labels to disclose information such as the source of the bottled water, products that violate this provision are being sold in Massachusetts.

RECOMMENDATION:

The state should enforce its labeling requirements. If a bottler draws from a municipal water supply, the label should clearly state that the source is a "public water supply" as well as the location of the source.

FINDING:

DPH fails to use available sanctions to enforce bottled water regulations. When unlicensed and mislabeled bottled water is found on store shelves, DPH does not take steps to remove the product or impose fines.

RECOMMENDATION:

DPH should use its statutory authority to impose sanctions, including removal of unpermitted products from store shelves and imposition of fines when appropriate.

FINDING:

DPH has no formal recall policy for bottled water. Some recent bottled water recalls have been conducted without public notification or written documentation of the terms and conditions of the recall. The lack of a formal recall policy can lead to questions of industry interference in the oversight process, and may leave consumers without vital product quality information.

RECOMMENDATION:

DPH should establish a formal recall policy, including a procedure for appropriate public notification, and a requirement to document the terms and conditions of any product recall.

Centralize and Support a System of Oversight

FINDING:

The division of oversight duties between state and local agencies creates confusion and delays the permitting process. Furthermore, there is no clear policy that details how bottled water oversight duties are to be shared between local boards of health and DPH.

RECOMMENDATION:

A clear policy should be in place that clarifies the division of bottled water oversight duties between local boards of health and DPH. This will eliminate the confusion of roles that can result in permitting delays and a lack of adequate inspections.

FINDING:

Current permit fees do not reflect the cost of oversight or the value of the natural resource. At \$25 annually for in-state bottlers, and \$100 annually for out-of-state bottlers, the fees do not adequately support even a minimal system of oversight to ensure the quality and safety of bottled water.

RECOMMENDATION:

Massachusetts should increase permit fees. Permit fees should more accurately reflect the value of the natural resource and support an adequate regulatory structure.

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